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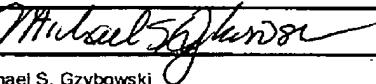
Total Number of Pages in This Submission

Application Number	09/973,285
Filing Date	October 9, 2001
First Named Inventor	Chia Mu Shao
Art Unit	3714
Examiner Name	Meagan Thomasson
Total Number of Pages in This Submission	7
Attorney Docket Number	131523-0002

## ENCLOSURES (Check all that apply)

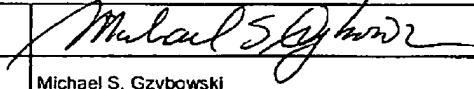
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Remarks		
Reply Brief		

## SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm Name	BUTZEL LONG		
Signature			
Printed name	Michael S. Gzybowski		
Date	June 16, 2008	Reg. No.	32,816

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Appl. No. 09/973,285

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PATENT APPLICATION*IN THE UNITED STATES PATENT AND TRADEMARK OFFICE*

*Group*  
*Art Unit:* 3713

*Attorney*  
*Docket No.:* 131523-0002 (New)

*Applicant:* Chia Mu SHAO

*Invention:* ELECTRONIC DART GAME

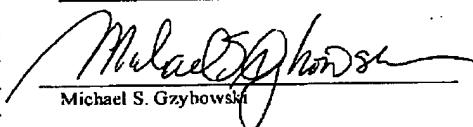
*Serial No.:* 09/973,285

*Filed:* October 9, 2001

*Examiner:* Christina Marks.

Certificate Under 37 CFR 1.8(b)

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on June 16, 2008


Michael S. Gzybowski

REPLY BRIEF

Commissioner of Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

In response to the Examiner's Answer mailed April 16, 2008, Appellant submits the following reply:

NEW GROUNDS OF REJECTION

In the Examiner's Answer the Examiner set forth two New Grounds for Rejection as follows:

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Claims 1-6, 8-11, 14 and 15 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Fuscone in view of Gordon et al.

Claim 7 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Fuscone and Gordon et al. and further in view of Clark.

## ARGUMENT

In each of the New Grounds of Rejection, Gordon et al. has been relied upon as teaching:

...[i]n an analogous system for measuring the point of impact of a missile, such as a sports projectile, on a target, Gordon discloses the use of electromagnetic coils (i.e. inductance coils), for use in the detection of the point of impact of said missiles on said target (col. 4, line 60- col. 5, line 3). Gordon explicitly discloses that "The coils may be air wound or, to achieve a higher field, wound around a ferromagnetic core" in col. 5, lines 1-3, wherein the term air would implies that the coils are coreless.

The Examiner concludes:

Therefore, Gordon teaches that it would have been obvious....to modify the dart board disclosed by Fuscone to include induction coils that are coreless, instead of induction coils containing iron cores, in an electronic sports target application analogous to that of a dart board.

Column 4, line 59 through column 5, line 3 of Gordon reads as follows:

Magnetic strips 18 may be replaced by suitable electromagnets and FIG. 5 schematically shows alternate means of constructing electro magnets with coils of wire, etc., designated 30. In this approach, a series of electromagnets is used with connections between coils made so that the north pole of the magnetic field that each produces is in the same direction. This may be accomplished with the wiring connections shown or by connecting all of the coils parallel, with the current

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flowing in the same direction in each coil. The coils may be air wound or, to achieve a higher field, wound around a ferromagnetic core.

It is important to note that Gordon teaches that the “[m]agnetic strips 18 may be replaced by suitable electromagnets and FIG. 5 schematically shows alternate means of constructing electro magnets with coils of wire.”

This means that in the three plane structure depicted in Figs. 4A-4C, the magnetic strips 18 in the plan shown in Fig. 4A could be replaced with electromagnets that are constructed from coils of wire.

There is no disclosure at all about eliminating the planes shown in Figs. 4B and 4C which include conductor wires 22 in the second plane and wires 16 in the third plane.

It is also important to note that the plastic envelop or mat of Gordon includes either magnets or electromagnets. In this regard, the missiles, e.g. baseballs, footballs, soccer balls, golf balls, handballs, etc, are not magnetic.

Thus any object, including a non-magnetic dart would create a detectable impact on the plastic envelop or mat of Gordon.

It is also important to note that at column 2, lines 9-14 Gordon teaches:

The first plane contains magnetic strips which create a magnetic field. The other two planes contain electrical conductors in which voltages are induced *upon deflection of the conductors*. In this later form, the magnetic field may be generated by electromagnets as well as permanent magnets.

Gordon expressly teaches that upon impact by a missile, the conductors deflect within the magnetic field, thus creating a detectable signal.

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### CONCLUSION

For the reasons advanced above, Appellant respectfully contends that the rejection of claims 1-6, 8-11, 14 and 15 as being unpatentable over Fuscone et al. in view of Gordon et al. under 35 U.S.C. §103(a) is improper because the examiner has not met the burden of establishing a prima facie case of obviousness of Appellant's claimed invention.

Moreover, for the reasons advanced above, Appellant respectfully contends that the rejection of claim 7 as being unpatentable over Fuscone et al. in view of Gordon et al. and Clark under 35 U.S.C. §103(a) is improper because the examiner has not met the burden of establishing a prima facie case of obviousness of Appellant's claimed invention.

In addition, for the reasons advanced in Appellant's Brief on Appeal, Appellant respectfully contends that the rejection of claims 1-6, 8-11, 14 and 15 as being unpatentable over Fuscone et al. under 35 U.S.C. §103(a) is improper because the examiner has not met the burden of establishing a prima facie case of obviousness of Appellant's claimed invention.

Moreover, for the reasons advanced in Appellant's Brief on Appeal, Appellant respectfully contends that the rejection of claim 7 as being unpatentable over Fuscone et al. in view of Clark under 35 U.S.C. §103(a) is improper because the examiner has not met the burden of establishing a prima facie case of obviousness of Appellant's claimed invention.

Reversal of the rejections on appeal is respectfully requested.

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This means that in Gordon, the magnets, or electromagnets are located in the back side of the plastic envelop or mat and the two planes containing the conductors are deflected towards the magnets or electromagnets upon impact by a missile.

In view of the teachings of Gordon, the Examiner's proposed modification of Fuscone in view of Gordon et al. is improper, because the result would require a structure in which the electromagnets of Gordon et al. would need to be positioned adjacent conductor layers, which conductor layers would have to be designed to deflect within the magnetic field created by the electromagnets upon impact by a missile.

This structure/function is completely opposite to Fuscone which does not provide any magnets or electromagnets (or magnetic field) within the dartboard or conductors that are configured to deflect within a magnet field provided within the dartboard.

Moreover, whereas Gordon does not provide magnetic missiles, Fuscone requires a magnetic dart.

The "coils" which the Examiner has relied upon Gordon as teaching are designed to produce the magnetic field within the plastic envelope or mat. In this regard note Gordon at column 5, lines 1-3 (cited by the Examiner):

The coils may be air wound or, to achieve a *higher field*, wound around a ferromagnetic core.

The only "field" in Gordon is the magnetic field in which the conductors deflect. This magnetic field is produced by the coils which make up the electromagnets.

The Examiner appears to have relied upon Gordon in error.

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Michael S. Gzybowski

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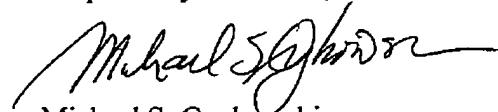
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To the extent necessary, a petition for an extension of time under 37 CFR §1.136 is hereby made. Please charge the fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 12-2136 and please credit any excess fees to such deposit account.

Respectfully submitted,



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